# MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

## **HVVi Semiconductors**

**Arizona Manufacturing Extension Partnership** 

**HVVi Achieves Competitive Advantage with Help From Arizona MEP** 

### **Client Profile:**

HVVi Semiconductors Inc. operates as a semiconductor company providing innovative technology that allows RF power transistors to function at high voltages comparative to existing technology. Since its inception in 2004, the company has been distinguished as a leading innovator to develop and commercialize high-frequency, high-voltage vertical field effect transistors (HVVFT) and has captured over 70 design concepts focused on serving customers for wireless-market applications such as radar, ISM (Industrial, Scientific, and Medical), broadcast and cellular base stations. The company employs 15 people at its facility in Phoenix, Arizona.

### Situation:

HVVi realized that to sustain their success while competing with over 70 semiconductor companies globally, they would need to explore new products that have never been developed or challenged. Initially, HVVi wanted to set up training for their group to research new product options. The company enlisted the Arizona Manufacturing Extension Partnership (Arizona MEP), a NIST MEP network affiliate, to create a workforce development plan for their training program.

#### Solution:

Arizona MEP helped HVVi acquire a workforce training grant to be applied towards the research of cutting edge equipment. The training was focused on how to efficiently utilize the wafer fabrication equipment, which was then used to create the first Air Gap Dielectric wafer. Arizona MEP created a step-by-step training procedure and partnered with Arizona State University to supply the facility and equipment.

#### Results:

- \* Obtained grant funding for high impact research.
- \* Created 22 jobs.
- \* Achieved a more competitive and profitable position.

## **Testimonial:**

"Without Arizona MEP's assistance, we would not have the flexibility and creativity to develop the wafer fab advantage we possess today."

Gary Hoshizaki, VP Business Development

